SEQUENCE LISTING

<110> University of Utah Research Foundation
Keating, Mark T.
Li, Dean Y.

<120> ELASTIN-BASED COMPOSITIONS

<130> 22458-702

<140> Not Yet Assigned
<141> - -

<150> PCT/US00/02526
<151> 2000-02-28

<150> US 09/258,217
<151> 1999-02-26

<160> 8

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 6
<212> PRT
<213> Homo sapiens

<400> 1
Val Gly Val Ala Pro Gly
1 5

<210> 2
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 2
Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Val Ala
1 5 10 15
Pro Gly Val Gly Leu Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly
20 25 30
Val Ala Pro Gly Val Gly Val Ala Pro Gly
35 40

<210> 3
<211> 712
<212> PRT
<213> Homo sapiens

<400> 3

```
Met Ala Gly Leu Thr Ala Ala Ala Pro Arg Pro Gly Val Leu Leu Leu
 1               5                  10                  15
Leu Leu Ser Ile Leu His Pro Ser Arg Pro Gly Gly Val Pro Gly Ala
            20                  25                  30
Ile Pro Gly Gly Val Pro Gly Gly Val Phe Tyr Pro Gly Ala Gly Leu
        35                  40                  45
Gly Ala Leu Gly Gly Gly Ala Leu Gly Pro Gly Gly Lys Pro Leu Lys
    50                  55                  60
Pro Val Pro Gly Gly Leu Ala Gly Ala Gly Leu Gly Ala Gly Leu Gly
65                  70                  75                  80
Ala Phe Pro Ala Val Thr Phe Pro Gly Ala Leu Val Pro Gly Gly Val
                85                  90                  95
Ala Asp Ala Ala Ala Ala Tyr Lys Ala Ala Lys Ala Gly Ala Gly Leu
            100                 105                 110
Gly Gly Val Pro Gly Val Gly Gly Leu Gly Val Ser Ala Gly Ala Val
        115                 120                 125
Val Pro Gln Pro Gly Ala Gly Val Lys Pro Gly Lys Val Pro Gly Val
    130                 135                 140
Gly Leu Pro Gly Val Tyr Pro Gly Gly Val Leu Pro Gly Ala Arg Phe
145                 150                 155                 160
Pro Gly Val Gly Val Leu Pro Gly Val Pro Thr Gly Ala Gly Val Lys
                165                 170                 175
Pro Lys Ala Pro Gly Val Gly Gly Ala Phe Ala Gly Ile Pro Gly Val
            180                 185                 190
Gly Pro Phe Gly Gly Pro Gln Pro Gly Val Pro Leu Gly Tyr Pro Ile
        195                 200                 205
Lys Ala Pro Lys Leu Pro Gly Gly Tyr Gly Leu Pro Tyr Thr Thr Gly
    210                 215                 220
Lys Leu Pro Tyr Gly Tyr Gly Pro Gly Gly Val Ala Gly Ala Ala Gly
225                 230                 235                 240
Lys Ala Gly Tyr Pro Thr Gly Thr Gly Val Gly Pro Gln Ala Ala Ala
                245                 250                 255
Ala Ala Ala Ala Lys Ala Ala Ala Lys Phe Gly Ala Gly Ala Ala Gly
            260                 265                 270
Val Leu Pro Gly Val Gly Gly Ala Gly Val Pro Gly Val Pro Gly Ala
        275                 280                 285
Ile Pro Gly Ile Gly Gly Ile Ala Gly Val Gly Thr Pro Ala Ala Ala
    290                 295                 300
Ala Ala Ala Ala Ala Ala Ala Lys Ala Ala Lys Tyr Gly Ala Ala Ala
305                 310                 315                 320
Gly Leu Val Pro Gly Gly Pro Gly Phe Gly Pro Gly Val Val Gly Val
                325                 330                 335
Pro Gly Ala Gly Val Pro Gly Val Gly Val Pro Gly Ala Gly Ile Pro
            340                 345                 350
```

```
Val Val Pro Gly Ala Gly Ile Pro Gly Ala Ala Val Pro Gly Val Val
        355                 360                 365
Ser Pro Glu Ala Ala Ala Lys Ala Ala Ala Lys Ala Ala Lys Tyr Gly
    370                 375                 380
Ala Arg Pro Gly Val Gly Val Gly Gly Ile Pro Thr Tyr Gly Val Gly
385                 390                 395                 400
Ala Gly Gly Phe Pro Gly Phe Gly Val Gly Val Gly Gly Ile Pro Gly
                405                 410                 415
Val Ala Gly Val Pro Gly Val Gly Gly Val Pro Gly Val Gly Gly Val
            420                 425                 430
Pro Gly Val Gly Ile Ser Pro Glu Ala Gln Ala Ala Ala Ala Ala Lys
        435                 440                 445
Ala Ala Lys Tyr Gly Val Gly Thr Pro Ala Ala Ala Ala Ala Lys Ala
    450                 455                 460
Ala Ala Lys Ala Ala Gln Phe Ala Leu Leu Asn Leu Ala Gly Leu Val
465                 470                 475                 480
Pro Gly Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly
                485                 490                 495
Val Ala Pro Gly Val Gly Leu Ala Pro Gly Val Gly Val Ala Pro Gly
            500                 505                 510
Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Ile Gly Pro Gly
        515                 520                 525
Gly Val Ala Ala Ala Ala Lys Ser Ala Ala Lys Val Ala Ala Lys Ala
    530                 535                 540
Gln Leu Arg Ala Ala Ala Gly Leu Gly Ala Gly Ile Pro Gly Leu Gly
545                 550                 555                 560
Val Gly Val Gly Val Pro Gly Leu Gly Val Gly Ala Gly Val Pro Gly
                565                 570                 575
Leu Gly Val Gly Ala Gly Val Pro Gly Phe Gly Ala Val Pro Gly Ala
            580                 585                 590
Leu Ala Ala Ala Lys Ala Ala Lys Tyr Gly Ala Ala Val Pro Gly Val
        595                 600                 605
Leu Gly Gly Leu Gly Ala Leu Gly Gly Val Gly Ile Pro Gly Gly Val
    610                 615                 620
Val Gly Ala Gly Pro Ala Ala Ala Ala Ala Ala Ala Lys Ala Ala Ala
625                 630                 635                 640
Lys Ala Ala Gln Phe Gly Leu Val Gly Ala Ala Gly Leu Gly Gly Leu
                645                 650                 655
Gly Val Gly Gly Leu Gly Val Pro Gly Val Gly Gly Leu Gly Gly Ile
            660                 665                 670
Pro Pro Ala Ala Ala Ala Lys Ala Ala Lys Tyr Gly Val Ala Ala Arg
        675                 680                 685
Pro Gly Phe Gly Leu Ser Pro Ile Phe Pro Gly Gly Ala Cys Leu Gly
    690                 695                 700
Lys Ala Cys Gly Arg Lys Arg Lys
705                 710
```

<210> 4
<211> 6
<212> PRT

<213> Artificial Sequence

<220>
<223> Sequence encoded by forward primer

<400> 4
Met Ala Gly Leu Thr Ala
1 5

<210> 5
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Forward primer

<400> 5
ctgctgctgc atatggcggg tctgacggcg 30

<210> 6
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Sequence encoded by complement to reverse primer

<400> 6
Ala Cys Gly Arg Lys Arg Lys Gln Lys Leu Ile Ser Glu Glu Asp Leu
1 5 10 15

<210> 7
<211> 66
<212> DNA
<213> Artificial Sequence

<220>
<223> Reverse primer

<400> 7
cgaacaccgg ccttctcttt tgtcttcgac tagtcgctcc tcctggacac tacttctaga 60
cgacga 66

<210> 8
<211> 730
<212> PRT
<213> Artificial Sequence

<220>

<223> Human elastin-c-myc fusion

<400> 8

```
Met Arg Gly Ser His His His His His His Ala Gly Leu Thr Ala Ala
 1               5                  10                  15
Ala Pro Arg Pro Gly Val Leu Leu Leu Leu Leu Ser Ile Leu His Pro
            20                  25                  30
Ser Arg Pro Gly Gly Val Pro Gly Ala Ile Pro Gly Gly Val Pro Gly
        35                  40                  45
Gly Val Phe Tyr Pro Gly Ala Gly Leu Gly Ala Leu Gly Gly Gly Ala
    50                  55                  60
Leu Gly Pro Gly Gly Lys Pro Leu Lys Pro Val Pro Gly Gly Leu Ala
65                  70                  75                  80
Gly Ala Gly Leu Gly Ala Gly Leu Gly Ala Phe Pro Ala Val Thr Phe
                85                  90                  95
Pro Gly Ala Leu Val Pro Gly Gly Val Ala Asp Ala Ala Ala Ala Tyr
            100                 105                 110
Lys Ala Ala Lys Ala Gly Ala Gly Leu Gly Gly Val Pro Gly Val Gly
        115                 120                 125
Gly Leu Gly Val Ser Ala Gly Ala Val Val Pro Gln Pro Gly Ala Gly
    130                 135                 140
Val Lys Pro Gly Lys Val Pro Gly Val Gly Leu Pro Gly Val Tyr Pro
145                 150                 155                 160
Gly Gly Val Leu Pro Gly Ala Arg Phe Pro Gly Val Gly Val Leu Pro
                165                 170                 175
Gly Val Pro Thr Gly Ala Gly Val Lys Pro Lys Ala Pro Gly Val Gly
            180                 185                 190
Gly Ala Phe Ala Gly Ile Pro Gly Val Gly Pro Phe Gly Gly Pro Gln
        195                 200                 205
Pro Gly Val Pro Leu Gly Tyr Pro Ile Lys Ala Pro Lys Leu Pro Gly
    210                 215                 220
Gly Tyr Gly Leu Pro Tyr Thr Thr Gly Lys Leu Pro Tyr Gly Tyr Gly
225                 230                 235                 240
Pro Gly Gly Val Ala Gly Ala Ala Gly Lys Ala Gly Tyr Pro Thr Gly
                245                 250                 255
Thr Gly Val Gly Pro Gln Ala Ala Ala Ala Ala Ala Ala Lys Ala Ala
            260                 265                 270
Ala Lys Phe Gly Ala Gly Ala Ala Gly Val Leu Pro Gly Val Gly Gly
        275                 280                 285
Ala Gly Val Pro Gly Val Pro Gly Ala Ile Pro Gly Ile Gly Gly Ile
    290                 295                 300
Ala Gly Val Gly Thr Pro Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala
305                 310                 315                 320
Lys Ala Ala Lys Tyr Gly Ala Ala Ala Gly Leu Val Pro Gly Gly Pro
                325                 330                 335
Gly Phe Gly Pro Gly Val Val Gly Val Pro Gly Ala Gly Val Pro Gly
            340                 345                 350
Val Gly Val Pro Gly Ala Gly Ile Pro Val Val Pro Gly Ala Gly Ile
        355                 360                 365
Pro Gly Ala Ala Val Pro Gly Val Val Ser Pro Glu Ala Ala Ala Lys
```

```
    370                 375                 380
Ala Ala Ala Lys Ala Ala Lys Tyr Gly Ala Arg Pro Gly Val Gly Val
385                 390                 395                 400
Gly Gly Ile Pro Thr Tyr Gly Val Gly Ala Gly Gly Phe Pro Gly Phe
                405                 410                 415
Gly Val Gly Val Gly Gly Ile Pro Gly Val Ala Gly Val Pro Gly Val
            420                 425                 430
Gly Gly Val Pro Gly Val Gly Gly Val Pro Gly Val Gly Ile Ser Pro
        435                 440                 445
Glu Ala Gln Ala Ala Ala Ala Ala Lys Ala Ala Lys Tyr Gly Val Gly
    450                 455                 460
Thr Pro Ala Ala Ala Ala Ala Lys Ala Ala Ala Lys Ala Ala Gln Phe
465                 470                 475                 480
Ala Leu Leu Asn Leu Ala Gly Leu Val Pro Gly Val Gly Val Ala Pro
                485                 490                 495
Gly Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Leu
            500                 505                 510
Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val
        515                 520                 525
Gly Val Ala Pro Gly Ile Gly Pro Gly Gly Val Ala Ala Ala Ala Lys
    530                 535                 540
Ser Ala Ala Lys Val Ala Ala Lys Ala Gln Leu Arg Ala Ala Ala Gly
545                 550                 555                 560
Leu Gly Ala Gly Ile Pro Gly Leu Gly Val Gly Val Gly Val Pro Gly
                565                 570                 575
Leu Gly Val Gly Ala Gly Val Pro Gly Leu Gly Val Gly Ala Gly Val
            580                 585                 590
Pro Gly Phe Gly Ala Val Pro Gly Ala Leu Ala Ala Ala Lys Ala Ala
        595                 600                 605
Lys Tyr Gly Ala Ala Val Pro Gly Val Leu Gly Gly Leu Gly Ala Leu
    610                 615                 620
Gly Gly Val Gly Ile Pro Gly Gly Val Val Gly Ala Gly Pro Ala Ala
625                 630                 635                 640
Ala Ala Ala Ala Ala Lys Ala Ala Ala Lys Ala Ala Gln Phe Gly Leu
                645                 650                 655
Val Gly Ala Ala Gly Leu Gly Gly Leu Gly Val Gly Gly Leu Gly Val
            660                 665                 670
Pro Gly Val Gly Gly Leu Gly Gly Ile Pro Pro Ala Ala Ala Ala Lys
        675                 680                 685
Ala Ala Lys Tyr Gly Val Ala Ala Arg Pro Gly Phe Gly Leu Ser Pro
    690                 695                 700
Ile Phe Pro Gly Gly Ala Cys Leu Gly Lys Ala Cys Gly Arg Lys Arg
705                 710                 715                 720
Lys Gln Lys Leu Ile Ser Glu Glu Asp Leu
                725                 730
```